

**Monthly Letter Progress Report #1 – May 2016**  
**Study of Brackish Aquifers in Texas – Project No. 4 –**  
**Trinity Aquifer**  
**TWDB Contract No. 1600011950**

*Submitted to*

**Texas Water Development Board**  
**P.O. Box 13231**  
**Austin, Texas 78711**

*Prepared by:*

**Southwest Research Institute**  
**6220 Culebra**  
**San Antonio, TX 78238**  
**210-684-5111**

**May 15, 2016**



**SOUTHWEST RESEARCH INSTITUTE®**

## Monthly Letter Progress Report # 1 – May 2016 Study of Brackish Aquifers in Texas – Project No. 4 – Trinity Aquifer TWDB Contract No. 1600011950

### 1.0 Budget and Expenses

This report summarizes the project costs for the billing period from the contract approval date January 6, 2016 through April 2016. The total expenses through April 2016 are \$0. A breakdown of the budget by task is provided in Table 1. A copy of the progress report has been sent to the Texas Water Development Board (TWDB) Contracts Department along with the monthly invoice.

| <b>Table 1. Project Budget Versus Expenses</b> |  |           |          |          |       |                  |
|--|--|-----------|----------|----------|-------|------------------|
| Task   | Description  | Budget    | Invoices |          |       | Remaining Budget |
|  |  |           | Current  | Previous | Total |                  |
| 1&7  | Project Management and Reporting   | \$36,195  | \$0      | \$0      | \$0   | \$36,195         |
| 2  | Data Acquisition and Method Development  | \$134,555 | \$0      | \$0      | \$0   | \$134,555        |
| 3  | Develop a Stratigraphic Framework Model of the Trinity Aquifer and Calculate Brackish Water Volumes                          | \$116,878 | \$0      | \$0      | \$0   | \$116,878        |
| 4  | Delineate Potential Production Areas   | \$40,001  | \$0      | \$0      | \$0   | \$40,001         |
| 5  | Determine the Amount of Brackish Groundwater That Can Be Produced Without Causing Impact on Lateral and Vertical Fresh Water | \$56,740  | \$0      | \$0      | \$0   | \$56,740         |
| 6  | Stakeholder Communication  | \$35,631  | \$0      | \$0      | \$0   | \$35,631         |
| Total  |  | \$400,000 | \$0      | \$0      | \$0   | \$400,000        |

### 2.0 Progress on Tasks

This report summarizes activities on project tasks through the month of April 2016 and represents the first progress report on this contract.

Task 1: Project Management and Reporting

Task 1 has been subdivided into two subtasks. Progress made on the subtasks is as follows:

Subtask 1.1: Organization and Management

There has been no progress on this subtask.

Subtask 1.2: Project Schedule and Budget

There has been no progress on this subtask.

Task 2: Data Acquisition and Method Development

Task 2 has been subdivided into four subtasks. Progress on the subtasks is as follows:

Subtask 2.1: Acquisition and Initial Analysis of Groundwater Samples

There has been no progress on this subtask.

Subtask 2.2: Acquisition and Initial Analysis of Geophysical Logs

There has been no progress on this subtask.

Subtask 2.3: Develop Technical Approach for Estimating Total Dissolved Solids From Geophysical Logs

There has been no progress on this subtask.

Subtask 2.4: Use Geophysical Log Interpretation to Analyze Stratigraphy and Map Fresh, Brackish, and Saline Groundwater

There has been no progress on this subtask.

Task 3: Develop a Stratigraphic Framework Model of the Trinity Aquifer and Calculate Brackish Water Volumes

Task 3 has been subdivided into two subtasks. Progress on the subtasks is as follows:

Subtask 3.1: Extend Stratigraphy for the Hill Country Trinity

There has been no progress on this subtask.

Subtask 3.2: Determine Volumes of Fresh, Brackish, and Saline Groundwater

There has been no progress on this subtask.

Task 4: Delineate Potential Production Areas

There has been no progress on this task.

Task 5: Determine the Amount of Brackish Groundwater That Can Be Produced Without Causing Impact on Lateral and Vertical Fresh Water

There has been no progress on this task.

Task 6: Stakeholder Communication

There has been no progress on this task.

Task 7: Reporting

Task 7 has been subdivided into two subtasks. Progress on the subtasks is as follows:

Subtask 7.1: Project Monitoring Procedures

There has been no progress on this subtask.

Subtask 7.2: Project Deliverables

There has been no progress on this subtask.

### **3.0 Planned Activities for the Next Month**

Task 1: Project Management and Reporting

Task 1 has been subdivided into two subtasks. Planned activities for the subtasks are as follows:

Subtask 1.1: Organization and Management

Southwest Research Institute<sup>®</sup> (SwRI<sup>®</sup>) staff on the project will have an internal kickoff meeting to coordinate future activities and management of the project. Subcontracts with the two teaming partners, INTERA and the Bureau of Economic Geology, and the two in-kind teaming partners, Edwards Aquifer Authority and the Barton Springs Edwards Aquifer Conservation District, will be finalized in May.

Subtask 1.2: Project Schedule and Budget

The schedule will be modified to account for the delayed start date.

Task 2: Data Acquisition and Method Development

Task 2 has been subdivided into four subtasks. Planned activities for the subtasks are as follows:

Subtask 2.1: Acquisition and Initial Analysis of Groundwater Samples

Data on water quality will start being gathered during late May.

Subtask 2.2: Acquisition and Initial Analysis of Geophysical Logs

Geophysical logs will start being gathered during late May.

Subtask 2.3: Develop Technical Approach for Estimating Total Dissolved Solids From Geophysical Logs

Preliminary assessment of developing correlations between total dissolved solids and geophysical logs will begin in late May.

Subtask 2.4: Use Geophysical Log Interpretation to Analyze Stratigraphy and Map Fresh, Brackish, and Saline Groundwater

No work is expected to occur in May.

Task 3: Develop a Stratigraphic Framework Model of the Trinity Aquifer and Calculate Brackish Water Volumes

Task 3 has been subdivided into two subtasks. Planned activities for the subtasks are as follows:

Subtask 3.1: Extend Stratigraphy for the Hill Country Trinity

No work is expected to occur in May.

Subtask 3.2: Determine Volumes of Fresh, Brackish, and Saline Groundwater

No work is expected to occur in May.

Task 4: Delineate Potential Production Areas

No work is expected to occur in May.

Task 5: Determine the Amount of Brackish Groundwater That Can Be Produced Without Causing Impact on Lateral and Vertical Fresh Water

No work is expected to occur in May.

Task 6: Stakeholder Communication

No work is expected to occur in May.

Task 7: Reporting

Task 7 has been subdivided into two subtasks. Planned activities for the subtasks are as follows:

Subtask 7.1: Project Monitoring Procedures

Project monitoring procedures will be prepared during May.

Subtask 7.2: Project Deliverables

No work is expected to occur in May.

#### **4.0 Problems/Issues and Actions Required/Taken**

No problems or issues were encountered in April.